



Monterey Bay National Marine Sanctuary

Sanctuary Office Report



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A REPORT FOR THE SANCTUARY ADVISORY COUNCIL MEMBERS

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ABOUT THE SANCTUARY

Designated in 1992, the Monterey Bay National Marine Sanctuary (MBNMS or Sanctuary) is a federally protected marine area offshore of California's central coast. Stretching from Marin to Cambria, the MBNMS encompasses a shoreline of 276 miles and 5,322 square nautical miles of ocean.

Supporting one of the world's most diverse marine ecosystems, it is home to numerous mammals, seabirds, fishes, invertebrates and plants in a remarkably productive coastal environment. The MBNMS was established for the purpose of resource protection, research, education and public use of this national treasure.

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) AND NATIONAL MARINE SANCTUARY PROGRAM (NMSP) NEWS

President Bush announces the expansion of the Monterey Bay National Marine Sanctuary to include the Davidson Seamount

Speaking at the opening of the Smithsonian Museum of Natural History new Sant Ocean Hall on September 26, 2008, President George W. Bush announced the expansion of the Monterey Bay National Marine Sanctuary to include the Davidson Seamount. As a result of management plan revision, a seven-year process involving public input and agency collaboration, Monterey Bay National Marine Sanctuary will be expanded to include Davidson Seamount. The Final Rule to include the new boundaries is expected by early November. For more information, see <http://montereybay.noaa.gov/new/2008/092608dsm.html>.

Multicultural Program Awarded NOAA Silver Medal

On Tuesday, November 18th the Monterey Bay and Channel Islands National Marine Sanctuaries will be awarded a NOAA Silver Medal Award for the successful implementation of their Multicultural Education for Resource Issues

Threatening Oceans (MERITO) Program in Santa Cruz, Monterey, Santa Barbara and Ventura Counties. This program was initiated 6 years ago in the MBNMS and expanded with an internal sanctuary education minigrant to CINMS in 2004. This program's current focus is in engaging the growing Latino community by making a connection with their daily lives and the variety of environmental issues affecting the ocean, sanctuaries and the surrounding watersheds. Program elements include yearlong, issue based curricula for in-school and after school programs, teacher training program, field based programs for students, teachers and family groups, internships and media projects. This program has provided high-level ocean and marine themed programming and opportunities for thousands of participants and has a media impact in the millions.

Debut of "One NOAA" Kiosk

Two new state-of-the-art touch-screen "One-NOAA" kiosks were unveiled on November 14-15, 2008 during "NOAA and Our Planet Day" at the Aquarium of the Pacific in Long Beach, California. The new kiosks were developed by NOAA's Office of National Marine Sanctuaries, NOAA Fisheries Service, and NOAA Weather Service. The new kiosks offer a high-impact visual and auditory showcase of all the treasures national marine sanctuaries have to offer. With the click of a button, users are provided with extensive information about sanctuary species and habitats, and learn about various sanctuary activities, including programs on education, outreach, research and resource protection. Each kiosk also offers real-time weather information from the NOAA Weather Service to help boaters and other members of the public interested in ocean conditions. The kiosk also offers information regarding the NOAA Fisheries Service, as well as offerings from the Aquarium of the Pacific such as interactive and online games for children.

Three Sanctuaries Release FEIS, Revised Management Plans and Final Rule

After seven years of planning, public input and interaction, the National Oceanic and Atmospheric Administration has just released the final plans for the management of Gulf of the Farallones, Cordell Bank and Monterey Bay national marine sanctuaries. These sanctuaries are among the most complex in the entire national marine sanctuary program, existing immediately adjacent to an urban center of approximately 8 million people. Our new plan, and the new or clarified regulations included in it, address existing issues and issues that have emerged since the sites' original plans were formulated. The press release announcing the event, and summary information, maps and photos may be found on <http://sanctuaries.noaa.gov/jointplan>.

NATIONAL MARINE SANCTUARY NEWS

Channel Islands NMS

Julie Bursek of CINMS was appointed as an alternate for education and outreach interests on the Marine Life Protection Act Initiative's Southern California Resource Stakeholder Group (MLPA RSG). Under the guidance of the Blue Ribbon Task Force, the MLPA RSG is responsible for working with a science advisory team and MLPA staff to help California improve the design and management of the south coast portion of a statewide network of marine protected areas (MPAs). The stakeholder group includes representatives of recreational angling, diving, commercial fishing, ports and harbors, conservation, business and government agencies with MPA-related responsibilities. The regional group's first meeting took place October 6-7 in El Segundo where members were introduced to one another and the stakeholder process.

Flower Gardens Bank NMS

Manta ray catalogs have been produced for check out by recreational dive boats. These binders contain images of 60 individual mantas that have been documented by divers at the Flower Garden Banks NMS along with date, location, and who made the sighting. Several mantas have been sighted on multiple occasions, spanning a time period of at least seven years. The purpose of these catalogs is to encourage divers to share their sightings with us to expand our manta sighting database. The individual manta rays are identified through distinguishing marks on their underside. Photographic and video documentation are preferred methods of record for the sightings. Thanks to Marissa Nuttall for the development of the binders. An online catalog is currently under development. Animals tagged with acoustic transmitters are also featured in the catalog. The FGBNMS, in partnership with Dr. Rachel Graham from Wildlife Conservation Society, has tagged six manta rays. Acoustic receivers are in place at East and West Flower Garden Bank, as well as Stetson Bank, within the Sanctuary. Information from these receivers has shown individual mantas visiting multiple sites within the Sanctuary. Additional receivers have been replaced at Sonnier and Bright Banks in the Northwestern Gulf of Mexico, and we have plans to deploy one at Geyer Bank. These three sites are outside the boundaries of the Sanctuary, but are areas of interest as identified through the FGBNMS Management Plan Review process. The receivers from these sites have not yet been downloaded.

Gulf of the Farallones NMS

On Saturday, November 15, the Farallones sanctuary hosted a highly successful cruise aboard *R/V Fulmar* into the Gulf of the Farallones and Marin County portion of the Monterey sanctuaries to familiarize congressional staff and other VIPs with the sanctuary. Congresswoman Lynn Woolsey's Senior Policy Advisory Tom Roth, representatives of the San Francisco Foundation and others learned about sanctuary resources, ecosystem dynamics, and issues. Species encountered included a white shark just after a "predatory event," Laysan Albatross, and numerous humpback whales. The itinerary encompassed several areas of Special Biological Significance along the Marin coast and offshore, for which special closures will protect sensitive wildlife aggregations. At the South Farallon Islands the vessel boarded a team of sanctuary staff who had just completed monitoring intertidal life, and had met with the refuge manager concerning closures.

Olympic Coast NMS

National Marine Sanctuary Foundation's (NMSF) Director of Government Relations & Education Programs Coordinator Letise LaFeir spent the week at Olympic Coast National Marine Sanctuary on a staff exchange. As part of the exchange an Olympic Coast National Marine Sanctuary staff member will spend a week at the NMSF offices early next year. Letise assisted staff on an education program at the elementary school on the Makah Reservation, briefed the staff on the work of the foundation, met individually with staff members to learn about OCNMS programs and attended an Advisory Council meeting.

Papahānaumokuākea Marine National Monument

Staff from the Northwestern Hawaiian Islands (NWHI) Papahānaumokuākea Marine National Monument (PMNM) are returning to Midway on Friday, Nov 7th, to resurvey sites in a study looking at the long term impact of derelict fishing nets on coral reef habitats. Elizabeth Keenan is leading the team, which consists of PMNM Deputy Superintendent Randy Kosaki and Sarah Fangman (on detail to PMNM from the ONMS Southeast Region). PMNM staff and partners completed conducting the initial survey and setting up permanent monitoring sites in August. The purpose of the study is to assess the impacts from nets that become entangled on the reefs by tracking health and survival of coral colonies, either after the net removal, or when nets are left in place. In order to document reef recovery or damage a subset of these sites will be monitored over time (initial, short and long term resurveys). The analysis of this data will indicate if the nets or the removal of significantly alter the benthos and substrate cover on the affected sites, and the length of any such disturbance. In this initial resurvey divers will photograph the marked coral colonies and then assess further damage or recovery that has occurred since the initial survey. More information on the study can be found at http://marinedebris.noaa.gov/projects/nwhi_coral.html.



MONTEREY BAY NATIONAL MARINE SANCTUARY NEWS AND PROGRAM UPDATES



MANAGEMENT

Staff Trained for Aviation Safety

September 30th, MBNMS Staff trained with US Coast Guard in Alameda on aviation safety. Three staff are now qualified for flights on Coast Guard, NOAA and other aircraft.

All Hands Meeting for JMPR communications training

Thirty-eight staff from Monterey Bay, Cordell Bank and Gulf of the Farallones met at the Santa Cruz Fisheries Lab on October 29th to learn about each site's new management plan and regulations, receive a refresher on NOAA/ONMS communication strategies, and practice how to stay on point (using talking points and transitional sentences) for the hot topics that may be in the public eye due to the release of the final documents. Sarah Marquis facilitated the session.

Virginia Tech student interviews Deputy on MBNMS resource management approaches

Deputy Superintendent Karen Grimmer was interviewed by grad student Michelle Ryan with the College of Natural Resources/Virginia Tech National Capital Region Campus on MBNMS resource management approaches and priorities. Ms Ryan had chosen the MBNMS as the main focus for her conservation ecology course, and since she had the opportunity to attend a conference at Elkhorn Slough NERR, contacted the site for a meeting.

Interview topics included mechanisms for community input, outreach efforts with business and tourism, performance measures and accountability, the inclusion of Davidson Seamount, and priority issues for 2009, to name a few. The student's knowledge based on her prior research was impressive, as she had read the draft management plan and other related documents from the website and had talked to local divers and other people in the area about their perspectives.



CBNMS, GFNMS and MBNMS staff participate in exercises for talking points on the joint management plan.

Photo Credit: Karen Grimmer

RESEARCH AND MONITORING

Historical ecology research to be presented at the 2008 California

Cooperative Oceanic Fisheries Investigations (CalCOFI) conference MBNMS historical ecology research, initiated by California Sea Grant state fellow Hugo Selbie, has been accepted for poster presentation display at the 2008 CalCOFI Conference. The abstract entitled "Preserving the future by unlocking the past: Establishing unknown ecological baselines through the collection, and analysis of historical source documents for NOAA's Monterey Bay National Marine Sanctuary" represents the first historical ecology research undertaken in the National Marine Sanctuary Program for MBNMS.

Sanctuary Staff Participate in Wetlands Science Symposium

On Wednesday, September 24, Water Quality Protection Program and Research Team staff attended the Central Coast Wetlands Science Symposium in Moss Landing, California. Regional experts shared their experiences related to wetland preservation, restoration, monitoring, and assessment to an audience of approximately 100 attendees with the goal of improving future efforts in these areas. Gary Conley presented a talk titled 'Measuring Change in Central Coast Watersheds' that illustrated temporal changes in water quality conditions during the last ten years. The symposium was followed by a roundtable discussion on Thursday, September 25 that focused on developing a regional entity for coordination and advancement of wetland science.

Trawling Impact Study initiated off central California

From 15 to 23 September 2008, Monterey Bay National Marine Sanctuary in collaboration with California State University Monterey Bay, The Nature Conservancy, Marine Applied Research and Exploration, and NOAA Fisheries initiated a multi-years trawling impact study on the continental shelf off Morro Bay, Ca. A Remotely operated vehicle was launched from the R/V FULMAR to locate appropriate study sites and establish an initial baseline. The goal of the study is to monitor and compare the impact of directed bottom trawling on soft bottom among four level of trawling intensity: no trawling, one trawl, one trawl per year, and multiple trawls on multiple years. The Prospecting sites were selected after consulting with a local fisherman. Currently The Nature Conservancy owns all of the trawl permits in this region and a private Conservation Fishing Agreement will allow to be reasonably certain that trawling by others is unlikely to confound the study. A controlled trawl impact study of this type has never been conducted on the west coast and will provide important information for management.

SIMoN staff concludes 2008 subtidal MPA monitoring using R/V FULMAR off Big Sur coast

From September 29-October 3, SIMoN staff and research divers from UC Santa Cruz's Partnership for Interdisciplinary Studies of Coastal Oceans (UCSC-PISCO) sampled 10 sites for invertebrates, algae, and young-of-the-year fishes along the coast of Big Sur, CA. These sites included marine protected areas (MPAs) recently established by the State of California and adjacent reference sites that are not in an MPA. Researchers completed 88 dives without incident while supervised by NOAA Divemasters Scott Kathey and Chad King. Due to increasing swell, dives at the end of the week were limited to 30 ft or deeper. Results of this monitoring project will be used by CDFG to determine the effectiveness of the MPAs at the end of a 5-year interval (ending in 2012).

SIMoN staff coordinates fire-related sampling efforts along Big Sur coast

On October 9, SIMoN staff and Bridget Hoover met with researchers from UC Santa Cruz's Partnership for Interdisciplinary Studies of Coastal Oceans (UCSC-PISCO) and the US Geological Survey to coordinate sampling efforts along the coast of Big Sur, CA during the coming winter. Recent fires in Big Sur have razed coastal hillsides close to shore, and any significant rainfall this winter will mobilize pyrogenic debris and surface soils, clog creeks, and move tons of terrigenous materials into the sanctuary. In addition, some fire suppression materials used to combat the fires contain high levels of nitrogen, and PISCO researchers will study how nearshore biological communities, and in particular kelp forests, respond to this influx of nutrients. Further monitoring is being conducted by Snapshot Day volunteers with partial funding from SIMoN, and researchers will be using the baseline data collected by Snap Shot Day volunteers spanning the last 8 years.

Local Television Program Airs Monterey Bay National Marine Sanctuary Underwater Footage



"Underwater Wilderness: Creating Marine Protected Areas" aired on October 21st on KQED.

KQED Television (San Francisco) premiered a new episode of "Quest" on Tuesday, October 21 at 7:30 pm PDT, titled "Underwater Wilderness: Creating Marine Protected Areas." Much of the underwater footage featured was filmed and submitted by Sanctuary Integrated Monitoring Network (SIMoN) staff. This episode is also available online at <http://www.kqed.org/quest/television/underwater-wilderness-creating-marine-protected-areas>.

Study on fishes associated with a thermal outfall nearing completion

On October 22, SIMoN staff met with Dr. Lara Ferry-Graham of Moss Landing Marine Lab to discuss completion of a study characterizing the fishes associated with the Moss Landing Power Plant thermal outfall. Stemming from earlier studies funded by the Sanctuary Integrated Monitoring Network (SIMoN), this project focuses on fishes associated with the rocky habitat surrounding the massive pipes. The outfall discharges sea water heated as part of the power plant's once-through cooling system. The typical habitat at Moss Landing consists of steep

sandy slopes, so the rocks protecting the outfall act as a novel habitat and attract several fish species more commonly associated with kelp forest habitats. The complete report is slated for release in early 2009.

SIMoN staff provides material for Sea Grant publication on MPA project

On October 29, SIMoN staff worked with Christina Johnson, California Sea Grant, providing both photographs of marine organisms observed in recently established Marine Protected Areas (MPAs) along the central coast of California. The focus of the one-page article entitled "Central Coast MPA Baseline Data Collection: Surveys of Shallow-Water Rocky Reef Communities" is kelp forest monitoring conducted by UC Santa Cruz's Partnership for Interdisciplinary Studies of Coastal Oceans (UCSC-PISCO). SIMoN staff participates in these surveys and much of the research is conducted off the R/V FULMAR. The goal of the program is to collect baseline data to

"monitor the effects of the MPAs on kelp forest ecosystems, including commercially and recreationally harvested species." Sea Grant California publishes a quarterly newsletter, and the article is slated for the winter 2009 publication.

Monitoring Marine Protected Areas from a Submersible

On October 29 and 30, Sanctuary staff conducted underwater video transects in Monterey Bay National Marine Sanctuary aboard the DELTA, a two-person submersible. The submersible dives were part of an effort to monitor state marine protected areas off the central California coast. The study was lead by the Moss Landing Marine Laboratories, the University of California Cooperative Extension Sea Grant program, and the NOAA Fisheries Ecology Division of the Southwest Fisheries Science Center.

A good year for Common Murres in Monterey Bay

During the first week of November 2008, Beach COMBERS volunteers continued to report a higher number of beach cast Common Murres than usual. This increase in deposition is likely due to a successful breeding season. Beach COMBERS, funded by the Sanctuary Integrated Monitoring Network (SIMoN), is a collaborative effort between the Monterey Bay National Marine Sanctuary, Moss Landing Marine Laboratories, California Department of Fish and Game Marine Wildlife Veterinary Care and Research Center, and other state and research institutions, with the specific goal of using deposition of beach cast carcasses as an index of the health of the sanctuary. For additional information, see <http://www.sanctuariesimon.org/monterey/sections/beachCombers/index.php>

Discovery of Giant Squid (*Architeuthis dux*) in Monterey Bay Added to Sporadic Events Webpage

Last summer, researchers from the Pelagic Shark Research Foundation (PSRF) discovered the carcass of a giant squid (*Architeuthis dux*) near Santa Cruz. These animals are rarely seen, dead or alive, and this particular specimen was the most complete found in the Eastern Pacific Ocean. SIMoN and PSRF worked together to gather information regarding this unusual find and the life history of the giant squid in order to post a new article on the Sporadic Events webpage. For more information, please visit http://www.sanctuariesimon.org/monterey/sections/other/sporadic_giantsquid.php.

MBNMS Contributes Davidson Seamount Publications to NOAA Central Library

MBNMS Staff provided NOAA Central Library with an EndNote Library of products resulting from two Office of Ocean Exploration funded expeditions to Davidson Seamount. Results from the two expeditions contributed to 10 peer-reviewed science publications, 16 technical reports, 13 science conference presentations, 3 videos, 2 books, and numerous news media reports.

National Estuarine Research Reserve Association meets in Central California

The National Estuarine Research Reserve Association had their annual meeting at Asilomar this November. The MBNMS is a close partner with the Elkhorn Slough National Estuarine Research Reserve, working on joint jurisdiction issues of tidal erosion and monitoring in Elkhorn Slough. With over 200 colleagues from NOAA and Research Reserves across the nation, this was an exceptional opportunity for sanctuary staff to gain and share insight on a variety of estuarine management and program details.

Researchers Discover Century-Old Anchor off Big Sur Coast

On November 17, National Marine Sanctuaries, Monterey Bay National Marine Sanctuary, and Sanctuary Integrated Monitoring Network (SIMoN) researchers discovered what appears to be a large century-old anchor while conducting subtidal research along the Big Sur coast. The divers were able to record high-definition video of the anchor. A preliminary identification suggests it is either an Admiralty anchor, or Rodgers patent anchor, commonly used in the mid to late 19th century. Both Bruce Terrell (ONMS Maritime Historian) and Robert Schwemmer (Regional Coordinator, Maritime Heritage Program) will be reviewing the video for further identification.

RESOURCE PROTECTION

Strategic Plan for Regional Water Quality Monitoring Coordination Completed

A Strategic Plan for water quality monitoring coordination and data synthesis on the Central Coast of California has been finalized. The plan outlines a series of tasks related to data integration and access, monitoring coordination, tracking land-use management improvements, and data analysis/reporting that will improve our ability to assess and respond to changing water quality conditions in Central Coast watersheds and the Monterey Bay National Marine Sanctuary. Key tasks will be implemented over the next five years through our regional partners and the Sanctuary's Regional Water Quality Data Synthesis, Assessment, and Management (SAM) Project. The Strategic Plan can be found at: http://www.ccamp.net/sam/index.php/Main_Page.

Circulations Study Attempts to Solve Chronic Bacteria Problem in Pillar Point Harbor

On Saturday, September 27th Water Quality Protection Program staff participated in a circulation study of Pillar Point harbor that was funded through a grant to the San Mateo County Resource Conservation District. This three day study involved over 50 volunteers on land, sea and in the air to observe the movements of both citrus fruit and colored dye that were deployed at four locations around the harbor. Water samples were collected from approximately 25 locations at 15-minute intervals. The goal is to learn the source and fate of indicator bacteria in the harbor.

Web tool launched for coordinated management of food safety and water quality

Sanctuary staff have developed and launched an online tool to improve coordination and communication of Central Coast regional efforts to resolve conflicts between food safety and water quality protection. The Network Wiki (<http://awqa.org/networkwiki>) is an online forum for members of the Farm, Food Safety, & Conservation Network to discuss emerging issues, coordinate action, disseminate and collectively edit information and materials relevant to the reduction of food safety risks through methods that minimize impacts to water quality and the environment. The Network Wiki fills a regional communication gap identified by stakeholders of the Farm, Food Safety, & Conservation Network.

Storm Water Plans Closer to Approval in Santa Cruz

On October 22, 2008 Water Quality Protection Program staff participated in a meeting with non-governmental organizations and Santa Cruz County/City personnel to discuss five proposed storm water management plans under review by the Central Coast Regional Water Quality Control Board. All cities with a population of greater than 50,000 people are required to have approved storm water plans. The plans have strict requirements for public education and participation, illicit discharge detection, municipal operations, pre and post construction, hydromodification and pollution prevention activities. The five plans will be available for public comment in early November.

Citizen Volunteers Capture Water Samples During First Flush Event

On the evening of Saturday, November 1st, 45 volunteers mobilized to sample 20 storm drain outfalls in Monterey county during the first significant rain event of the season as part of the MBNMS Network's First Flush program. Significant rain began falling in Monterey county around 7:15pm, and volunteers were on the ground by 7:45pm. Volunteers filled sample bottles to be analyzed at a laboratory for metals, bacteria, nutrients, suspended solids, and urea. First Flush is the largest wet season monitoring event of its kind along the central coast.

MBNMS Staff Participate in Big Sur Site Visits

MBNMS staff participated in site visits led by the California Department of Transportation (Caltrans) with staff from several government agencies (Monterey County, California Coastal Commission, California Department of Fish and Game) and the El Sur Ranch property owner. The purpose of the site visits along the Big Sur coast was to assess proposed inland and sidecasting locations for the disposal of debris flows expected during the upcoming winter storms as a result of the Basin Complex Fire. MBNMS staff have been working intensively with Caltrans and other regulatory agencies to address the expectation of exceptionally high debris flows and landslides over the next several years as a result of this fire.



First Flush volunteers sampling at Lover's Point in Pacific Grove.

Photo Credit: Anna Holden-Martz

MBNMS concurs with EPA decision for dredge disposal

The MBNMS Permit Coordinator evaluated the October 20, 2007 report entitled "Harbor Entrance and Inner Harbor Sampling and Analyses Plan Results and Proposed 2008-09 Dredging Plan" prepared by Red Hills Environmental, Inc. This report describes the physical, chemical, and biological testing and results for Santa Cruz Harbor dredged material slated for disposal within the MBNMS. On November 4th, after discussion with MBNMS staff, the US Environmental Protection Agency determined that this material is suitable for unconfined aquatic disposal (SUAD), and approved disposal. The MBNMS concurred with this decision. Disposal operations will begin on November 10th.

MBNMS Water Quality Data Used in HAB Research

On November 21st, WQPP staff met with Jenny Lane, UCSC PhD candidate, to discuss her research focused on harmful algal blooms in the Monterey Bay. She is currently developing methods to compare freshwater nutrient loads with spatially and temporally focused upwelling and phytoplankton productivity. She will be incorporating water quality data from the SAM dB in her study.

Monterey Bay 9th Annual Snapshot Day Report Finalized

The 9th Annual Snapshot Day report was released this week. On May 3rd, 2008 180 volunteers monitored water quality in 173 streams flowing to the MBNMS. Forty-nine percent of the sites sampled met the water quality objectives for all parameters. Nitrate and E.coli had the most exceedences at 20% and 24% of the sites respectively. The report can be downloaded at <http://montereybay.noaa.gov/monitoringnetwork/pdf/ss2008.pdf>.

Enforcement

Joint USCG-MBNMS Air Patrol

On September 25, NOAA OLE /MBNMS Enforcement Officer Bob Yerena and MBNMS Superintendent Paul Michel flew with a USCG environmental patrol aboard a Dolphin helicopter. The purpose of the patrol was to demonstrate to USCG the mutual benefits of USCG-MBNMS joint patrols and convey MBNMS patrol needs. The USCG flight crew was very enthusiastic and supportive.

Completion of Third 2008 Cooperative Enforcement Training Session

On October 28, 2008, Scott Kathey conducted training for four state park rangers and three Coast Guard personnel in Monterey to familiarize them with the MBNMS regulations and enforcement program. The training prepared them to work cooperatively with the MBNMS and NOAA OLE to help monitor human activity in the sanctuary and assist with response actions. The training was well received and was the final area training session for the season. In total, MBNMS and NOAA OLE have trained 21 State Park rangers, 19 state Fish & Game wardens, 5 Coast Guard boarding officers and unit commanders, and one NOAA volunteer. MBNMS is awaiting a decision by OLE whether it will deputize the State Park ranger trainees in accordance with a cooperative agreement signed between OLE and CA State Parks in 1998.

EDUCATION, VOLUNTEER AND OUTREACH PROGRAMS

MERITO Academy introduces 292 students to the MBNMS

During the month of September 2008, the Monterey Bay National Marine Sanctuary's Multicultural Education for Resource Issues Threatening Oceans (MERITO) program kicked off its MERITO Academy at 14 sites introducing 292 students to the Monterey Bay National Marine Sanctuary. During the 2008-2009 academic year, 22 MERITO Academy programs will run at 18 sites in the cities of



MERITO students enjoying time at the beach.

Photo Credit: Sonya Padron

Marina, Seaside, Salinas, Pajaro, Monterey, Watsonville, and Freedom to deliver the 40-week MERITO Academy to an estimated 350 historically underserved students in the Monterey Bay Area. This sanctuary and BWET funded program provides hands-on, inquiry based watershed and ocean science experiences for 5th to 8th grade students who are predominately English language learners. Activities included an introduction to the MBNMS and a watershed model demonstration.

MERITO staff host professional development seminars for B-WET program

During the month of September 2008, MERITO staff co-hosted three professional development trainings for 50 California BWET recipients in San Francisco, Santa Barbara, and Monterey, CA. The training, "Adapting Your Program for Multicultural Audiences" was co-developed with the Monterey Bay Aquarium to discuss the importance of incorporating culture and diversity into environmental education programs.

MERITO bilingual presentations to Latino school kids from Salinas

MBNMS-MERITO staff gave two bilingual presentations to a group of over fifty 5-9th grade students from Salinas (most of them Latinos), enrolled in a week-long outdoor school program coordinated by the Sempervirens Outdoor School and the Exploring New Horizons program. The interactive presentations focused on watersheds and non-point source pollution, and were very well received by teachers, students and program coordinators as a highlight for the week.

Volunteers Experience the Wonders of Monterey Bay

On October 18th a group of 16 MERITO Academy site leaders and docents went on a cruise on board of the Fulmar, to explore offshore waters in the Monterey Bay. MERITO staff is thankful to its site leaders as they play an essential role in making MERITO Academy a successful and well-received program. Also, on October 25th approximately 40 various sanctuary volunteers, including members of Team OCEAN, BayNet, the Coastal Discovery Center, and Water Quality, were treated to a voyage on the R/V Fulmar in appreciation

of their efforts supporting the sanctuary. Many sea birds were observed as well as numerous humpback whales. The afternoon cruise enjoyed amazing frolicking by several humpbacks including spy hopping and breaching. The volunteers were in awe and tremendously inspired to continue their work.

MERITO Academy introduces 65 students to the MBNMS

During the month of October 2008, the Monterey Bay National Marine Sanctuary's Multicultural Education for Resource Issues Threatening Oceans (MERITO) program kicked off its MERITO Academy with students at Bay View Elementary's After School Academy and lead students from MacQuiddy Elementary on a day-long hike at Elkhorn Slough. During the 2008-2009 academic year, 22 MERITO Academy programs will run at 18 sites in the cities of Marina, Seaside, Salinas, Pajaro, Monterey, Watsonville, and Freedom to deliver the 40-week MERITO Academy to an estimated 350 historically underserved students in the Monterey Bay Area. This sanctuary and BWET funded program provides hands-on, inquiry based watershed and ocean science experiences for 5th to 8th grade students who are predominately English language learners. Activities included an introduction to the MBNMS, watershed model demonstration, and hiking at Elkhorn Slough National Estuarine Research Reserve

New Interpretive Signs Approved for Installation

Liz Love and Leslie Stone (from Leslie Stone and Associates design firm) spent a day visiting a total of 17 different proposed interpretive sign locations with city staff from Pacific Grove and Monterey to finalize the installment arrangements for new sanctuary interpretive signs. The Monterey signs were approved by the city's architectural review board about 2 weeks ago. All signs are now being fabricated and we expect to have them in 4-6 weeks.

Education Staff attends MPA Workshop

Sacha Lozano and Liz Love participated in a full-weekend Train the Trainers workshop on Nov. 1 & 2 sponsored by the Marine Protected Areas Education & Outreach Initiative/MBNMS Foundation and held at Hopkins Marine Station and the Monterey Bay Aquarium. The workshop provided information on California's Marine Life Protection Act, the research associated with it, a case study of CINMS presented by Julie Bursek, as well tools for interpreting and training volunteers about MPAS.

Multicultural Adult Education in Salinas

On November 3, MBNMS-MERITO staff started a series of classroom presentations to serve over 400 ESL students at the Adult School in Salinas (CA) throughout the months of November and December. During these presentations MERITO staff introduce culturally diverse residents of Salinas to the MBNMS, and provide an overview of land-to-sea connections in watersheds draining to the Monterey Bay. At the same time, these presentations are being used to collect feedback from students to inform a needs assessment for an updated place-based adult education strategy in Salinas.

MBNMS Attends IPMEN Conference

Lisa Uttal and Seaberry Nachbar participated in the International Pacific Marine Educators Network (IPMEN) Conference in Townsville, Australia presenting their "Voices of the Bay" Fisheries Education Program to a group of Pacific rim and island educators. Topics discussed at the meeting ranged from ocean literacy, Marine Protected Areas, traditional indigenous local knowledge and global climate change. The goal of this group is to create a network of Pacific Ocean educators to share and promote important marine and coastal education topics.

New Outreach Partnership with NOAA Fisheries

Monterey Bay National Marine Sanctuary education staff, Dawn Hayes and Lisa Uttal attended the NOAA Southwest Fisheries Science Center unveiling of the new mural on their Pacific Grove building entitled, "The California Current, Climate Change, and Sustainable Fisheries," by artists Ray Troll and Roberto Sala. This mural recognizes the rich heritage of fishing, scientific research, and management in Monterey Bay. The MBNMS education team is partnering with NOAA Fisheries with their "Voices of the Bay" Fisheries Education Program and will work with NMFS to highlight the artwork in future educational materials.

Exploration Center Event

Monterey Bay National Marine Sanctuary staff are partnered with the National Marine Sanctuary Foundation on a fundraising event to benefit the MBNMS' Exploration Center and education facility in Santa Cruz. The proposed 10,000 square foot visitor center will engage locals and tourists alike with hands on exhibits and interactive programs. The NMSF has



Santa Cruz community leaders learn about the MBNMS Exploration Center.

Photo Credit: Nicole Capps

committed to raising \$3 million for the center's exhibits. In partnership with the City of Santa Cruz, the MBNMS is nearing completion of the planning process.

Sanctuary Education Panel

The Monterey Bay National Marine Sanctuary's Education Panel (SEP) met on November 17th to review sanctuary education plans, the release of the new MBNMS management plan and to outline the panel's schedule for the 2009 calendar year. The SEP's recent focus has been to work with the MBNMS education staff to secure funding for the sanctuary's multicultural programming, which operates primarily on soft funds.

MERITO Explores Expansion of Adult Programming

Monterey Bay National Marine Sanctuary Education & Outreach Staff met with the Principal of the Salinas Valley Adult School to discuss the potential expansion of the English as a Second Language (ESL) programming currently done in partnership with the Multicultural Education for Resources Issues Threatening Oceans (MERITO) program. Sacha Lozano is currently conducting a needs assessment for an advanced level ESL course, with an environmental theme and linkages to internships and career opportunities. The



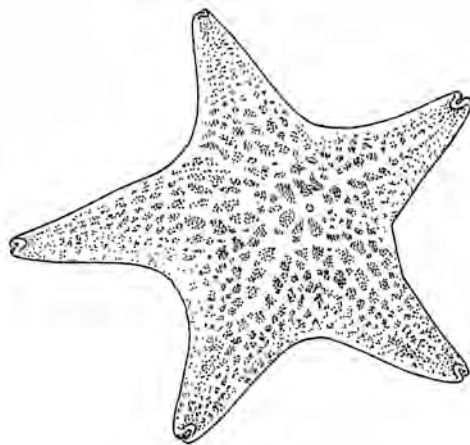
Teachers participating in a MERITO program.

Photo Credit: Sonya Padron

concept was favorably received and Sacha will host a focus group with current ESL Teachers to explore the concept for a spring pilot.

State of the Sanctuary Submission

Staff has compiled the Monterey Bay National Marine Sanctuary's memorable FY08 accomplishments for the Research, Resource Protection, Operations and Education teams. FY08 was an extremely productive year with many large-scale programs, products and outputs. Highlights include the SIMoN Web Expansion, Big Sur Site Characterizations, a National Registry project (<http://obsregistry.org/map.php>), California Coastal Water Quality Synthesis Assessment and Management (SAM) project, Spill response (COSCO BUSAN, mystery spill), Emergency Response to groundings, R/V Fulmar Operations (schedule, ops, safety trainings), MERITO's International Program Participation, 5-year report, and NOAA Silver Award, the Immersion Presents program planning, teacher workshop, program delivery, and media, and the California State Parks award for long term Partnerships.



SIGNIFICANT NEWS COVERAGE

09/21/08 – San Francisco Chronicle, “Report: Ocean debris will likely worsen”

09/26/08 – Whitehouse.gov, “Fact Sheet: Protecting Our Oceans”

09/26/08 – Whitehouse.gov, “President Bush Discusses U.S. Ocean Action Plan”

09/26/08 – Los Angeles Times, “Monterey Bay marine sanctuary to soon include large undersea mountain”

09/26/08 – AP, “Bush wants to expand marine protections in Pacific”

09/27/08 – Monterey County Herald, “Marine group seeks to fill council seat”

09/27/08 – Salinas Californian, “Monterey Bay Sanctuary seeks tourism adviser”

09/27/08 – Monterey County Herald, “Your Town”

10/01/08 – Salinas Californian, “Smiles to the resurfacing of old friends”

10/01/08 – Half Moon Bay Review, “Community volunteers aid circulation study at Pillar Point”

10/10/08 – Santa Cruz Sentinel, “Monarch students share clean-up exhibit with school”

10/12/08 – Santa Cruz Sentinel, “Small Schools' hosts celebration”

10/15/08 – San Jose Mercury News, “Branciforte Small Schools celebrate the bay “

10/19/08 – Santa Cruz Sentinel, “Dan Haifley, Our Ocean Backyard: Monterey Bay Canyon starts in your driveway”

10/21/08 – KQED.org, “Underwater Wilderness: Creating Marine Protected Areas”

10/24/08 – Salinas Californian, “Post-fire water monitoring begins in Big Sur on Saturday”

11/3/08 – Salinas Californian, "Lurie Keeps a Watch on Water" by Robert Walch

11/3/08 – Salinas Californian, “Lurie keeps a watch on water”

11/3/08 – Santa Cruz Sentinel, “Our Ocean Backyard: Storm water has wide-ranging effects”

11/5/08 – Monterey County Herald, “Runoff detectives collect samples”

11/6/08 – Monterey County Weekly, “Loyal Flush”

11/10/08 – Good Times Weekly, “Time for Change at Hand” by Sam Farr

11/17/08 – Surfing, “Ghost Tree R.I.P”

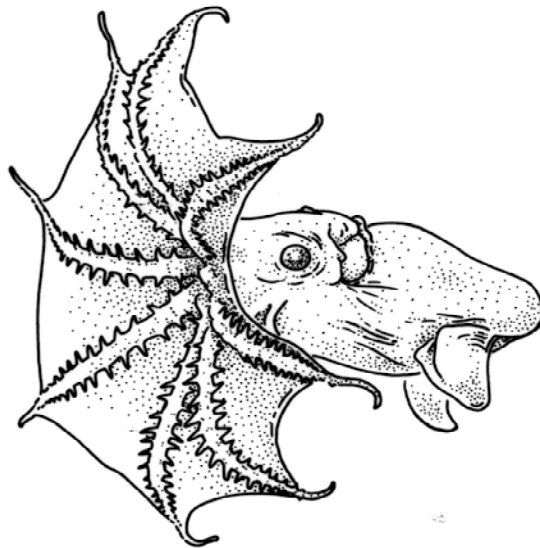
11/17/08 – Surflife, “Surfrider Celebrates Increased Protection For Monterey Bay Sanctuary”

11/18/08 – Ventura County Star, “OPINION: Lessons in ocean protection failures”

11/19/08 – Nature, “New Study Finds World's Coastal Waters Are Vastly Under Protected”

11/20/08 – NOAA, “NOAA Releases Plans for Managing and Protecting Cordell Bank, Gulf of the Farallones and Monterey Bay National Marine Sanctuaries”

- 11/21/08 – Los Angeles Times, “Revised rules at marine sanctuaries allow tow-in surfing at Mavericks”
- 11/21/08 – San Jose Mercury News, “Underwater volcano off California's Central Coast given national protection”
- 11/21/08 – Salinas Californian, “Monterey Bay sanctuary expanded by 775 square miles”
- 11/21/08 – Register Pajaronian, “New plan to add seamount to Monterey Bay National Marine Sanctuary”
- 11/21/08 – Monterey County Herald, “Sanctuary adds undersea mountain”
- 11/21/08 – Monterey County Herald, “Surfer tow-ins could end”



WEB SITE (<http://montereybay.noaa.gov/>)

Recent Updates

Visit the web pages listed below to see recently updated sections of the MBNMS web site.

- Press Release Announcing New Management Plans and Regs
http://montereybay.noaa.gov/intro/press_releases/2008/112008final_rule.pdf
- Final Management Plan Documents for CBNMS, GFNMS and MBNMS
<http://sanctuaries.noaa.gov/jointplan/>

*Please take a few moments to peruse the site. Your feedback is greatly appreciated.
Comments and suggestions can be sent to andrew.white@noaa.gov.*

FUN, OCEAN RELATED WEB SITES

Encyclopedia of the Sanctuaries

<http://www.ocean.com/Library/Encyclopedia/>

Oceans Live

<http://www.oceanslive.org/portal/>

SIMON

www.mbnms-simon.org

National Marine Sanctuary Program

<http://www.sanctuaries.nos.noaa.gov/>

NOAA National Centers for Coastal Ocean Science

<http://coastalscience.noaa.gov/>

National Estuarine Research Reserve System

<http://nerrs.noaa.gov/>

NOAA Ocean Explorer

<http://oceanexplorer.noaa.gov/>

National Data Buoy Center

<http://www.ndbc.noaa.gov/rmd.shtml>

National Ocean Service

<http://www.nos.noaa.gov/>

National Oceanic & Atmospheric Administration

<http://www.noaa.gov/>

Thank You Ocean

<http://www.thankyouocean.org/>

CALENDAR OF EVENTS:

| | |
|---------------|---|
| <i>19-Dec</i> | Sanctuary Advisory Council Meeting, Monterey. Contact Nicole Capps at (831) 647-4206 |
| <i>9-Jan</i> | Research Activity Panel Meeting, CSUMB. Contact Andrew DeVogelaere at (831) 647-4213. |
| <i>12-Feb</i> | Sanctuary Advisory Council Meeting, Half Moon Bay. Contact Nicole Capps at (831) 647-4206 |
| <i>13-Mar</i> | Research Activity Panel Meeting, Monterey Bay Aquarium. Contact Andrew DeVogelaere at (831) 647-4213. |
| <i>17-Apr</i> | Sanctuary Advisory Council Meeting, Moss Landing. Contact Nicole Capps at (831) 647-4206 |
| <i>18-Apr</i> | Currents Symposium. Contact Liz Love at (831) 647-4255 |
| <i>8-May</i> | Research Activity Panel Meeting, Long Marine Lab, UCSC. Contact Andrew DeVogelaere at (831) 647-4213. |
| <i>19-Jun</i> | Sanctuary Advisory Council Meeting, Carmel Valley. Contact Nicole Capps at (831) 647-4206 |
| <i>10-Jul</i> | Research Activity Panel Meeting, NOAA Fisheries, Santa Cruz. Contact Andrew DeVogelaere at (831) 647-4213. |
| <i>21-Aug</i> | Sanctuary Advisory Council Meeting, Santa Cruz. Contact Nicole Capps at (831) 647-4206 |
| <i>11-Sep</i> | Research Activity Panel Meeting, Hopkins Marine Station, Pacific Grove. Contact Andrew DeVogelaere at (831) 647-4213. |
| <i>16-Oct</i> | Sanctuary Advisory Council Meeting, Cambria. Contact Nicole Capps at (831) 647-4206 |
| <i>13-Nov</i> | Research Activity Panel Meeting, MBARI, Moss Landing. Contact Andrew DeVogelaere at (831) 647-4213. |
| <i>11-Dec</i> | Sanctuary Advisory Council Meeting, Monterey. Contact Nicole Capps at (831) 647-4206 |

Learn More About Your Sanctuary

The Sanctuary Office Report is produced bi-monthly by the Monterey Bay National Marine Sanctuary in conjunction with Sanctuary Advisory Council meetings. To learn more about the Sanctuary please visit our web site at: <http://www.montereybay.noaa.gov>.

To learn more about the Sanctuary Advisory Council please visit:
<http://www.montereybay.noaa.gov/intro/advisory.html>

The National Marine Sanctuary Program

The Monterey Bay National Marine Sanctuary is one of 14 marine protected areas in the National Marine Sanctuary System that encompass more than 150,000 square miles of marine and Great Lakes waters from Washington State to the Florida Keys, and from Lake Huron to American Samoa. The system includes 13 national marine sanctuaries and the Papahānaumokuākea Marine National Monument. Visit the NMSP web site at: <http://www.sanctuaries.nos.noaa.gov>

Get involved and stay informed!

To learn how to get involved in the Sanctuary visit:
<http://montereybay.noaa.gov/educate/internship.html>

Sign up for the MBNMS listserv to receive email notices about upcoming Sanctuary events, and public meetings of the Sanctuary Advisory Council and its Working Groups:
<http://montereybay.noaa.gov/discussiongroups/disgroups.html>.



MBNMS Staff

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Karen Grimmer – Deputy Superintendent
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Erica Burton – Research Assistant
Jennifer Brown – Research Associate
Steve Lonhart – SIMoN Scientist
Jean de Marignac – Field Scientist
Chad King – SIMoN Data Analyst
Gary Conley – SIMoN Water Quality Analyst
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Liz Love – Education Specialist
Lisa Emanuelson – Resource Issue Ed Specialist
Sonya Padron – Bilingual Education Specialist
Lisa Uttal – Education and Outreach Specialist
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Bridget Hoover – WQ Protection Program Director
Lisa de Marignac – Environmental Policy Specialist
Lisa Wooninck – Resource Protection Specialist
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Andrew White – Network Manager
Sophie De Beukelaer – GIS Analyst
David Minard – R/V Fulmar Captain
Hans Burning – R/V Fulmar Operator
Erik Larson – R/V Fulmar Operator

- Contact Information -

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